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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/807,069	07/11/2001	Yoshiki Nakagawa	1581/00262	2380

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EXAMINER

WILSON, DONALD R

ART UNIT	PAPER NUMBER
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1713

DATE MAILED: 06/27/2003

12

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/807,069

Applicant(s)

NAKAGAWA ET AL.

Examiner

Donald R Wilson

Art Unit

1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) 5, 10 and 19-31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-9 and 11-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 11.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed 5/28/03, has been fully considered with the following results.
2. The amendment overcomes the rejections under 35 U.S.C. § 112, first and second paragraphs and the rejections are withdrawn except in regards to Claim 17. The rejection of Claim 17 under 35 U.S.C. § 112, second paragraph, is maintained as is discussed below.
3. The amendment is not deemed to be persuasive in overcoming the prior art rejection for reasons discussed below.
4. The objection to the abstract and title are overcome by the amendment and the objections are withdrawn.

Previously Cited Statutes

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office Action.

Claim Rejections - 35 USC § 112, Second Paragraph

6. **Claims 17 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.** The basis of this rejection was stated in Detailed Action § 12 of the previous Office Action.
7. Claim 17 is indefinite because it is unclear what groups R²² and R²³ are, and further how these groups are also connected to the vinyl monomer. The basis of this rejection was stated in Detailed Action § 12 of the previous Office Action. Applicant's amendment reciting "an" as opposed to "the" *ethylenically unsaturated monomer* is not seemed to clarify the claim. If applicant intends the vinyl monomer to be that from which the polymer is made, then perhaps applicant should recite "the ethylenically unsaturated group of the terminal vinyl monomeric unit". However, the scope of what applicant is claiming would still be indefinite because of the lack of any description of groups R²² and R²³. It is also noted that at least one of R²² and R²³ would presumably need to be hydrogen as a vinyl group is defined as "CH₂=CH-".

Claim Rejections - 35 USC § 103(a)

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8. **Claims 1-4, 6-9 and 11-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP'036 in view of Mandal, Baudin, Muzyczko and/or Nishikubo.** The basis of this rejection was stated in Detailed Action § 16-19 of the previous Office Action.

9. Applicant traverses the rejection, acknowledging that EP'036 discloses the conversion of terminal halogen to an alkenyl group, but argues that the teachings are limited to alkenyl groups having a " $=CH_2$ " moiety. The basis of this argument is that the only specific disclosures of alkenyl groups have a " $=CH_2$ " moiety. This is not deemed to be persuasive because a disclosure is not limited to that which is specifically exemplified.

All disclosures in reference patent must be evaluated, including nonpreferred embodiments; reference is not limited to disclosure of specific working examples. *In re Mills and Palmer*, 176 USPQ 196 (CCPA 1972)

Disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or nonpreferred embodiments. *In re Susi*, 440 F.2d 442, 169 USPQ 423 (CCPA 1971). "A known or obvious composition does not become patentable simply because it has been described as somewhat inferior to some other product for the same use." *In re Gurley*, 27 F.3d 551, 554, 31 USPQ2d 1130, 1132 (Fed. Cir. 1994).

It is well established that a reference is available for all it teaches including nonpreferred embodiments as for instance is discussed in M.P.E.P. § 2123. EP'036 generically teaches,

- (i) the introduction of alkenyl groups by the reaction of the terminal halogen group to hydroxyl and subsequently to an alkenyl group by reaction with an acid halide, and
- (ii) the purpose of introducing the terminal alkenyl groups is to make the polymers curable using a polyvalent hydrogen silicon compound, or by photo polymerization.

Thus, lacking a showing of criticality for alkenyl groups of the instant invention, it would have been obvious to one of ordinary skill in the art to employ other acid chlorides than those specifically exemplified by EP'036, and which are known in the art to be useful for the same purpose, i.e., to make the polymers curable using a polyvalent hydrogen silicon compound, or by photo polymerization. As discussed in the previous Office Action, examples of using cinnamate as a well-known photo curable group to produce a cross-linked composition, are shown individually or collectively, by Mandal, Baudin, Muzyczko and/or Nishikubo.

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10. Applicant cites MPEP § 2143.01 as saying that "---[t]he prior art must suggest the desirability of the claimed invention." Applicant then states that "-- the above four references do not provide any motivation or suggestion to use the alkenyl groups represented by the general formula (1), including a cinnamoyl group, in lieu of a (meth)acryloyl group", and concludes that "[t]herefore, the cited references do not provide any motivations or suggestion to combine the teachings of the references." Applicant is referred to the first paragraph of MPEP § 2143.01, which states as follows:

"There are three possible sources for a motivation to combine references: the nature of the problem to be solved, the teachings of the prior art, and the knowledge of persons of ordinary skill in the art." *In re Rouffet*, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457-1458 (Fed. Cir. 1998).

The issue is not whether Reference A and B specifically teach that they should be combined. The issue is whether one of ordinary skill in the art, confronted with the combined teachings of References A and B would have found their combination obvious. If it can be logically deduced that the reference will imply something to one of ordinary skill in the art that the reference does not come right out and say, then logical reasoning will make that reference evidence for its implicit disclosure, as well as for its explicit disclosure.

"In considering the disclosure of a reference, it is proper to take into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonable be expected to draw therefrom." *In re Preda*, 159 USPQ 342 (CCPA, 1968).

In the instant situation, EP'036 generically teaches the introduction of terminal alkenyl groups for the purpose of making the polymers photocurable. It is well known in the prior art that a broad range of alkenyl groups, including substituted alkenyl groups such as cinnamoyl groups, undergo photocuring to form cross-links. Lacking a showing of criticality for compositions with cinnamoyl groups as the photocurable alkenyl group, it would have been obvious to one of ordinary skill in the art to use cinnamoyl chloride as the acid chloride in the process of EP'036 with the expectation of equivalent results to other known photocurable alkenyl groups.

11. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and

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does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). It is believed that the Examiner has only employed knowledge which was within the level of ordinary skill at the time the claimed invention was made,

Action Is Final

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

13. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

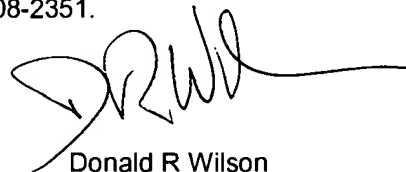
14. This application contains Claims 5, 10 and 19-31 are drawn to an invention nonelected with traverse in Paper No. 7. A complete reply to the final rejection must include cancelation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Future Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald R Wilson whose telephone number is 703-308-2398.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on 703-308-2450. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications. The unofficial direct fax phone number to the Examiner's desk is 703-872-9029.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-2351.

A handwritten signature in black ink, appearing to read 'DR Wilson', with a long horizontal flourish extending to the right.

Donald R Wilson
Primary Examiner
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